

What is claimed is:

1. A method for transmitting a data packet from a mobile node in a mobile ad-hoc communications network, said data packet being addressed to a destination node in said network, the method comprising:

transmitting a request to send message from said mobile node to a plurality of other nodes in said network; and

transmitting said data packet from said mobile node to each respective one of said other nodes in said network upon said mobile node receiving a respective clear to send message from said each respective other node.

2. A method as claimed in claim 1, further comprising:

receiving a plurality of realizations of said packet sent to said other nodes at a destination node via a plurality of relay nodes; and

processing said received plurality of realizations at said destination node to minimize a likelihood of packet error.

3. A method as claimed in claim 2, wherein:

when said destination node receives said plurality of realizations of said packets in a Rake window, said destination node combines said plurality of realizations of said packet; and

when said destination node receives said plurality of realizations of said packets outside of said Rake window, said destination node buffers said packets in a delay jitter buffer and selects one of said packets meeting a certain criteria.

4. A method as claimed in claim 1, wherein:

said data packet transmitting transmits said data packet from said mobile node to a respective said other node in said network after said mobile node receives said respective clear to send message from said respective other node irrespective of

whether said mobile node has received another respective clear to send message from any more of said other nodes.

5. A method as claimed in claim 1, wherein:

said data packet transmitting transmits said data packet from said mobile node to each of said plurality of other nodes in said network after said mobile node receives each said respective clear to send message from each said respective other node.

6. A method as claimed in claim 1, wherein:

said data packet transmitting narrowcasts said data packet to said other nodes.

7. A method as claimed in claim 6, wherein:

said narrowcast includes a plurality of unicasts.

8. A method as claimed in claim 1, wherein:

said request to send message and said clear to send messages each include unicast addressing information representing an available number of routes in said network via which to route said data packet to said destination node, each of said available routes including at least one of said other nodes.

9. A method for transmitting a data packet from each of a plurality of nodes in a mobile ad-hoc communications network to a mobile node in said network, the method comprising:

transmitting a request to send message from each of said plurality of other nodes in said network to said mobile node; and

transmitting said data packet from each respective one of said other nodes in said network to said mobile node upon each of said other nodes receiving a respective clear to send message from said mobile node.

10. A method as claimed in claim 9, wherein:

said data packet transmitting transmits said data packet from a respective said other node in said network to said mobile node after said respective other node receives said respective clear to send message from said mobile node irrespective of whether any of said other nodes has received another respective clear to send message from said mobile node.

11. A method as claimed in claim 9, wherein:

said data packet transmitting transmits said data packet from each of said other nodes to said mobile node after every said other node has received a respective said clear to send message from said mobile node.

12. A mobile node in a mobile ad-hoc communications network, adapted to transmit a data packet being addressed to a destination node in said network, said mobile node comprising:

a transmitter, adapted to transmit a request to send message from said mobile node to a plurality of other nodes in said network; and

a controller, adapted to control said transmitter to transmit said data packet to each respective one of said other nodes in said network upon said mobile node receiving a respective clear to send message from said each respective other node.

13. A mobile node as claimed in claim 12, wherein:

said controller is adapted to control said transmitter to transmit said data packet to a respective said other node in said network after said mobile node receives said respective clear to send message from said respective other node irrespective of whether said mobile node has received another respective clear to send message from any more of said other nodes.

14. A mobile node as claimed in claim 12, wherein:

said controller is adapted to control said transmitter to transmit said data packet to each of said plurality of other nodes in said network after said mobile node

receives each said respective clear to send message from each said respective other node.

15. A mobile node as claimed in claim 12, wherein:
said transmitter narrowcasts said data packet to said other nodes.

16. A mobile node as claimed in claim 12, wherein:
said request to send message and said clear to send messages each include unicast addressing information representing an available number of routes in said network via which to route said data packet to said destination node, each of said available routes including at least one of said other nodes.

17. A mobile ad-hoc communications network, comprising:
a mobile node; and
a plurality of other nodes, being within broadcast distance of said mobile node;

said nodes being adapted to transmit a request to send message to a mobile node in said network;

said mobile node being adapted to transmit a clear to send message to each of said nodes when said mobile node is capable of receiving a data packet from each of said nodes; and

each of said nodes being adapted to transmit said data packet to said mobile node upon receiving a respective said clear to send message from said mobile node.

18. A mobile ad-hoc communications network as claimed in claim 17, wherein:

each of said nodes transmits said data packet to said mobile node after receiving said respective clear to send message from said mobile node irrespective of whether any other of said nodes has received a respective said clear to send message from said mobile node.

19. A mobile ad-hoc communications network as claimed in claim 17, wherein:

said nodes transmit said data packet to said mobile node after every one of said nodes has received a respective said clear to send message from said mobile node.

20. A mobile ad-hoc communications network as claimed in claim 17, wherein:

at least one of said nodes is mobile.

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